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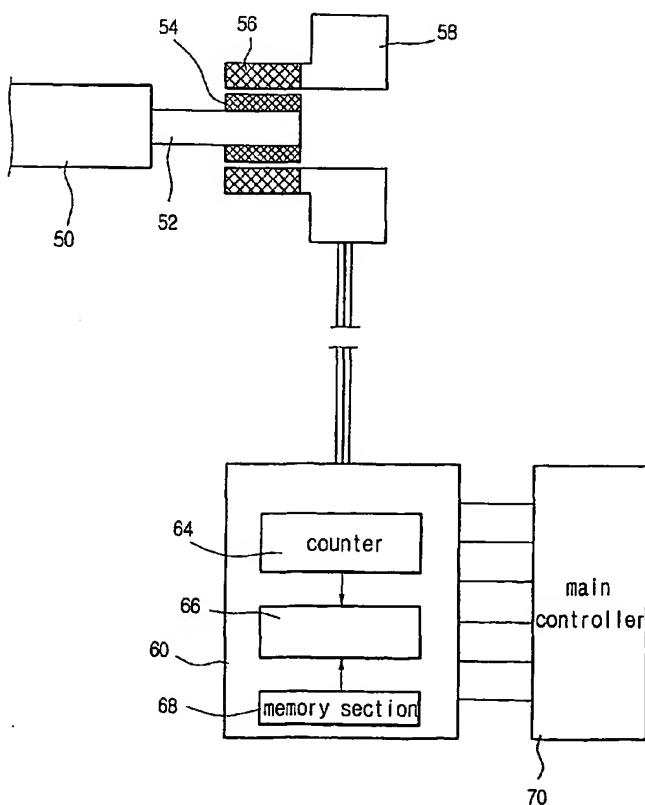
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(54) Title: APPARATUS FOR DETECTING POSITION OF DRAWBAR IN AUTOMATIC TOOL CHANGE DEVICE



(57) Abstract: Disclosed is an apparatus for detecting a position of a drawbar unit installed in a spindle unit. The apparatus is a part of an automatic tool exchange device for exchanging tools in the spindle unit of a machine tool. The apparatus transmits a signal to a main controller after detecting the position of the drawbar such that the main controller checks a state of a tool clamped by the drawbar unit. The drawbar unit is installed in the spindle unit forming the automatic tool exchange device and clamps the tool at a front thereof. A core is installed at a rear peripheral portion of the drawbar unit and a coil section having a cylindrical shape is wound around an outer peripheral portion of the core. An LC oscillating circuit is provided such that the LC oscillating circuit includes the coil section as a part thereof. An oscillating frequency of the LC oscillating circuit varies depending on a position of the core made of magnetic material, so the apparatus detects the position of the drawbar unit based on the oscillating frequency of the LC oscillating circuit. A position detecting section transmits present position information of the drawbar unit to a main controller, so the main controller detects the present position of the drawbar unit.

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